



SLIMS,PONDICHERRY



Date 09/05/18

From

DR.R.CHIDHAMBARAM ,
Professor and Head,
Dept.of radio-diagnosis and Imaging Sciences ,
SLIMS,PONDICHERRY
Bharath Institute of Higher Education and Research,
Chennai.

To

The Dean,
SLIMS
Bharath Institute of Higher Education and Research,
Chennai.

Sub: Permission to conduct value-added course:

INTEGRATED BRAIN ANATOMY-MRI BRAIN

Dear Sir,

With reference to the subject mentioned above, the department proposes to conduct a value-added course titled **INTEGRATED BRAIN ANATOMY-MRI BRAIN** on 09/05/18. We solicit your kind permission for the same.

Kind Regards

DR.R.CHIDHAMBARAM

FOR THE USE OF DEANS OFFICE

Names of Committee members for evaluating the course:

The Dean: *Dr. Jayalakshmi*

The HOD: *Dr. R. Chidhambaram*

The Expert: *Dr. T. Jothubaran*

The committee has discussed about the course and is approved.

Dean

Subject Expert

HOD

(Sign & Seal)

(Sign & Seal)

(Sign & Seal)

SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES
OSUDU, AGARAM VILLAGE,
KODAPAKKAM POST,
PONDICHERRY - 605 002

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Course Title: INTEGRATED BRAIN ANATOMY-MRI BRAIN

Course Objective: TO DEMONSTRATE INTEGRATED BRAIN ANATOMY-MRI BRAIN

Course Outcome: BETTER UNDERSTANDING OF INTEGRATED BRAIN ANATOMY-MRI BRAIN

Course Audience: ANY MEDICAL STUDENT

Course Coordinator: PROF.DR.R.CHIDHAMBARAM

Course Faculties with Qualification and Designation:

- 1. DR.R.CHIDHAMBARAM,MBBS,MDRD.PROF. AND HOD**
- 2. DR.SIVASUBRAMANIYAN,MBBS,DNB,ASST PROFESSOR**
- 3. DR.MOHAMED HASSAN MBBS,MDRD,SENIOR RESIDENT**

Course Curriculum/Topics with schedule (Min of 30 hours)-ENCLOSED

SlNo	Date	Topic	Time	Hours
1	03-02-2019	INTRO	2:00 PM	2 hours
2	04-02-2019	GENERAL OVERVIEW	2:00 PM	2 hours
3	05-02-2019	CORTEX	2:00 PM	2 hours
4	06-02-2019	MEDULLA	2:00 PM	2 hours
5	07-02-2019	WHITE MATTER	2:00 PM	2 hours
6	08-02-2019	GYRI	2:00 PM	2 hours
7	09-02-2019	SULCI	2:00 PM	2 hours
8	10-02-2019	FISSURES.CISTERNS	2:00 PM	2 hours
9	11-02-2019	VENTRICLES	2:00 PM	2 hours
10	12-02-2019	ARTERIAL SUPPLY	2:00 PM	2 hours
11	13-02-2019	VENOUS SUPPLY	2:00 PM	2 hours
12	14-02-2019	VENOUS SINUSES	2:00 PM	2 hours
13	15-02-2019	MIDLINE STRUCTURES	2:00 PM	2 hours
14	16-02-2019	BRAIN STEM	2:00 PM	2 hours
15	17-02-2019	CEREBELLUM	2:00 PM	2 hours
			Total Hours	30

REFERENCE BOOKS: (Minimum 2)

1.GREINGER AND ALLISON.

2.MRI BASCIS

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OFFICE OF THE DEAN

Sri Lakshmi Narayana Institute of Medical Sciences

OSUDU, AGARAM VILLAGE, VILLIANUR COMMUNE, KUDAPAKKAM POST,
PUDUCHERRY - 605 502.

[Recognised by Medical Council of India, Ministry of Health letter No. U/12012/249/2005-ME (P -II) dt. 11/07/2011]
[Affiliated to Bharath University, Chennai - TN]

Circular

29.05.2019

Sub: Organising Value-added Course: INTEGRATED BRAIN ANATOMY-MRI BRAIN. reg

With reference to the above mentioned subject, it is to bring to your notice that Sri Lakshmi Narayana Institute of Medical Sciences, **Bharath Institute of Higher Education and Research** is organizing "**INTEGRATED BRAIN ANATOMY-MRI BRAIN**". The course content and registration form is enclosed below."

The application must reach the institution along with all the necessary documents as mentioned. The hard copy of the application should be sent to the institution by registered/ speed post only so as to reach on or before May to June 2019. Applications received after the mentioned date shall not be entertained under any circumstances.

Dean

DEAN
SRI LAKSHMI NARAYANA INSTITUTE OF MEDICAL SCIENCES
OSUDU, AGARAM VILLAGE,
KODAPAKKAM POST,
PUDUCHERRY - 605 502

Encl: Copy of Course content

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VALUE ADDED COURSE

1. Name of the programme & Code :

**Integrated anatomy teaching-Brain anatomy: MRI
RAD 09**

2. Duration & Period

30 hrs & September 2018– January 2019 & February 2019 – August 2019

3. Information Brochure and Course Content of Value Added Courses

Enclosed as Annexure- I

4. List of students enrolled

Enclosed as Annexure- II

5. Assessment procedures:

Multiple choice questions- *Enclosed as Annexure- III*

6. Certificate model

Enclosed as Annexure- IV

7. No. of times offered during the same year:

September 2018– January 2019 & February 2019 – August 2019

8. Year of discontinuation: 2019

9. Summary report of each program year-wise

Value Added Course- September 2018 - August 2019					
Sl. No	Course Code	Course Name	Resource Persons	Target Students	Strength & Year
1	RAD 09-1	Integrated anatomy teaching-Brain anatomy: MRI	Dr. Sivasubramaniyan	MBBS	20 (Sep18 – Jan19)
2	RAD 09-2	Integrated anatomy teaching-Brain anatomy: MRI	Dr. Mohamed Hasan	MBBS	20 (Feb18- Aug-19)

10. Course Feed Back

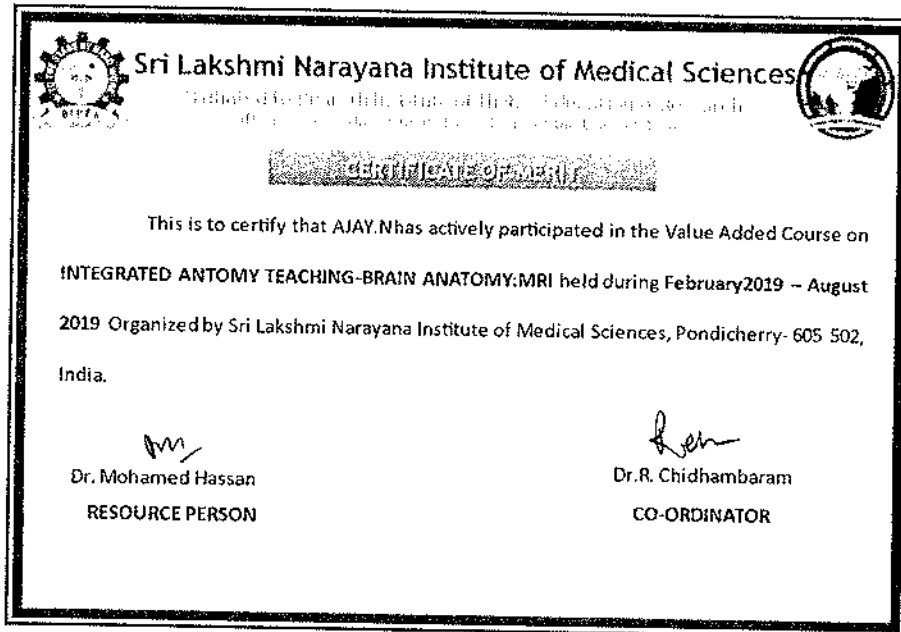
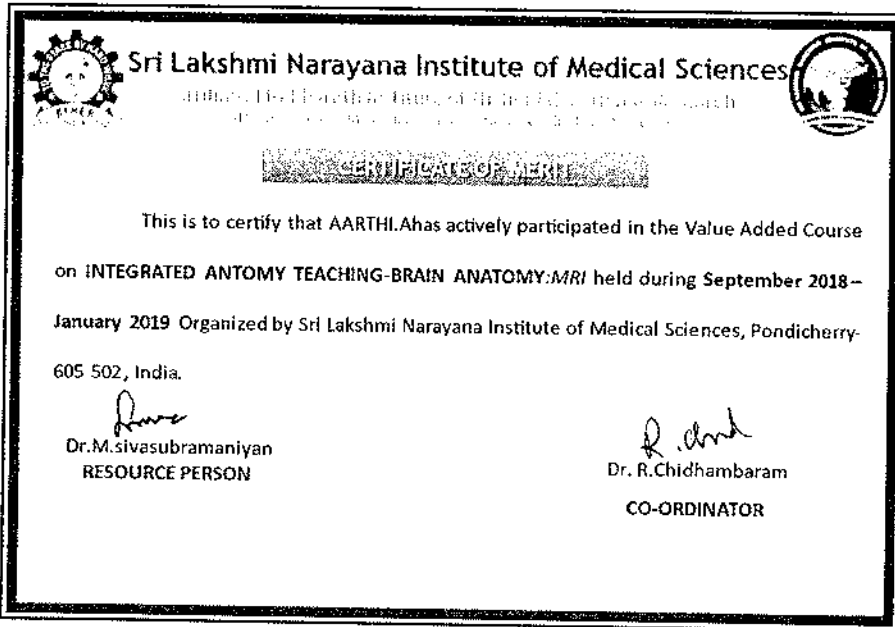
Enclosed as Annexure- V


RESOURCE PERSON


COORDINATOR

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VALUE ADDED COURSE

TOPIC:- Integrated Brain Anatomy teaching - Brain Anatomy MRI

List of Students Enrolled

1ST YEAR MBBS STUDENTS			
SL.NO.	NAME OF THE STUDENT	UNIVERSITY REG. NO.	signature
1	AARTHA	U16MB251	[Signature]
2	ABILASHA.K	U16MB252	[Signature]
3	ABITHA RAJLIN	U16MB253	[Signature]
4	ADAPALA PRIYANKA	U16MB254	[Signature]
5	ADHITHAYA RAJ.N	U16MB255	[Signature]
6	AJAY.N	U16MB256	[Signature]
7	AKSHYA.R	U16MB257	[Signature]
8	ALLARU KARTHIK ABHIROOP	U16MB258	[Signature]
9	AMAL.ASHOK	U16MB259	[Signature]
10	AMIRTHAVARSHINI.R	U16MB260	[Signature]
11	ANANYA SHARMA	U16MB261	[Signature]
12	ANGALAKUDURU DEEPCHAND	U16MB262	[Signature]
13	ANJAN BANERJEE	U16MB263	[Signature]
14	ANWESHA CHATTERJEE	U16MB264	[Signature]
15	ARCHANA.A	U16MB265	[Signature]
16	ARCHITHA.A	U16MB266	[Signature]
17	ARIVUMATHI.R	U16MB267	[Signature]
18	ARJUN.S	U16MB268	[Signature]
19	ASHVANTH KUMAR.A	U16MB269	[Signature]
20	ASMITHA.S.V	U16MB270	[Signature]
21	AVIDI.VENKATA SAISUSHMA	U16MB271	[Signature]
22	AVIRAL PATPATYA	U16MB272	[Signature]
23	BALACHANDRAN	U16MB273	[Signature]
24	BALAJI.S	U16MB274	[Signature]
25	BHASKARAN.K.C	U16MB275	[Signature]
26	BHAVANI.K.M	U16MB276	[Signature]
27	BLESSY AMALA RISHA.J	U16MB277	[Signature]
28	CAREENA DANIEL	U16MB278	[Signature]
29	CHANDRA PRAKASH.M	U16MB279	[Signature]
30	CHINJU.S.R	U16MB280	[Signature]

RESOURCE PERSON

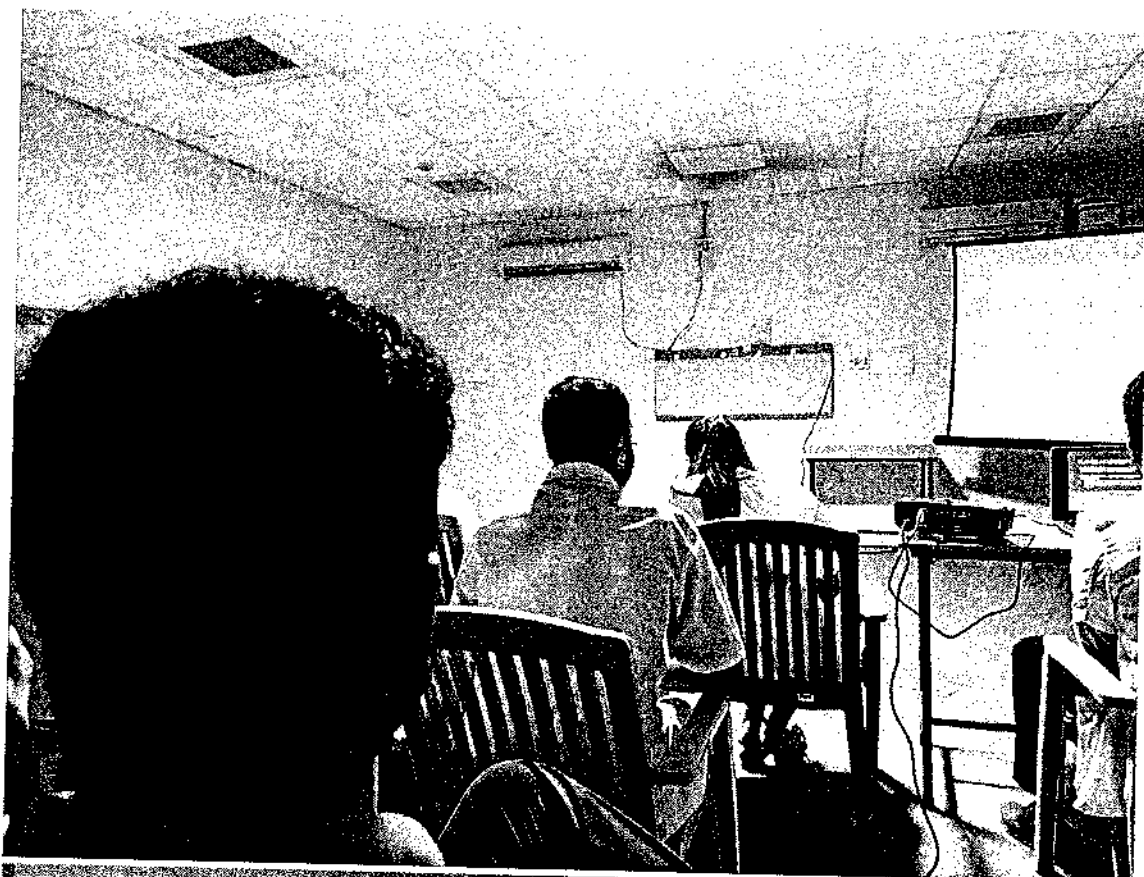
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COORDINATOR

[Signature]

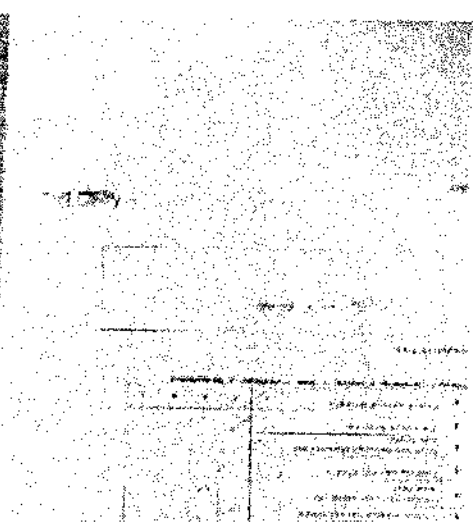
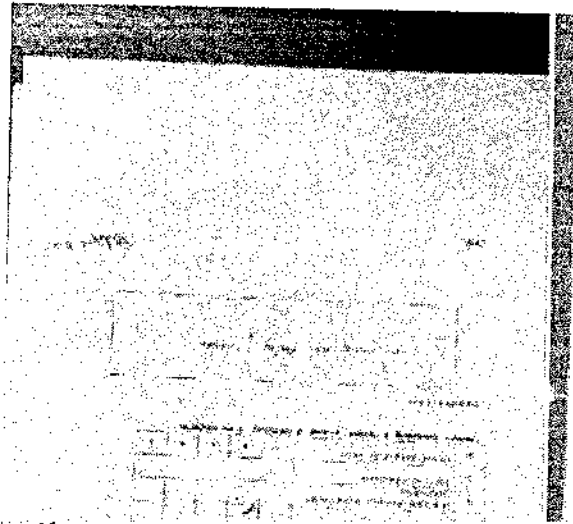
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BRAIN QUESTIONS**1. Regarding the imaging methods of the skull and brain:**

- (a) Skull radiograph is sensitive to cerebral pathology.
- (b) Contrast between white and grey matter is superior on MRI compared to CT of the brain.
- (c) The contents of the middle and posterior fossa of the brain are better visualized with CT than with MRI.
- (d) On T1-weighted MRI, white matter has lower signal (darker) than grey matter.
- (e) On T2-weighted MRI, grey matter has lower signal than white matter.

2. Regarding MRI of the brain:

- (a) Cerebrospinal fluid has high signal on T1-weighted images.
- (b) Cerebrospinal fluid has high signal on T2-weighted images.
- (c) In a proton density MRI sequence, grey matter is hyperintense to white matter.
- (d) In CT of the brain the white matter is darker than grey matter.
- (e) The fornix and anterior commissure are hypointense on T2-weighted images.

3. Regarding the technique of brain-CT and MR:

- (a) The axial plane for CT is usually parallel to a line tangential to the orbital roofs running to the anterior margin of the foramen magnum.
- (b) The normal choroid plexus and the pituitary gland enhance on postcontrast CT images.
- (c) Mechanism of contrast enhancement of gadolinium DTPA is similar to that of iodinated contrast medium.
- (d) Rapidly flowing blood is bright on a T1-weighted MRI.
- (e) Time of flight MR angiography is an invasive procedure.

4. Regarding the skull:

- (a) The skull vault develops in membrane.
- (b) The occipital bone forms part of the central skull base.
- (c) Sutures are between bones of cartilaginous ossification.
- (d) Perisutural sclerosis is seen in the neonate.
- (e) Sagittal sutural fusion occurs before adolescence.

5. In the skull:

- (a) The anterior fontanelle (bregma) is between the frontal and parietal bones at the junction of the sagittal and coronal sutures.
- (b) The posterior fontanelle (Lambda) closes around the second month after birth.
- (c) Pterion usually closes by 3-4 months.
- (d) The periosteum is invested externally and internally.
- (e) The endosteum is the outer of the two dural layers.

6. Regarding the skull:

- (a) Epicranial aponeurosis (galea aponeurotica) is loosely attached to the skull vault.
- (b) The skull vault has a high signal on T1-weighted MR images.
- (c) The diploic veins are found between the two tables of the skull.

- (d) Emissary veins traverse the skull vault.
- (e) Venous lacunae are close to the midline adjacent to the superior sagittal sinus.

7. In the skull:

- (a) The frontal bone forms in two halves.
- (b) The cribriform plate of ethmoid bone is interposed between the orbital plates of the frontal bone in the midline.
- (c) The coronal sutures separate the parietal and frontal bones.
- (d) The pterion is a point where the frontal, sphenoid, parietal, temporal bones meet.
- (e) Anteriorly the parietal bone articulates with the frontal bone and lesser wing of sphenoid.

8. Regarding the sphenoid bone:

- (a) The sphenoid air sinuses in the body of the sphenoid are symmetrical structures.
- (b) The anterior clinoid process is part of the greater wing of sphenoid bone.
- (c) The posterior clinoid process is part of the lesser wing of sphenoid bone.
- (d) The posterior part of the floor of the anterior cranial fossa is formed by the lesser wing of sphenoid.
- (e) Part of the middle cranial fossa is formed by the greater wing of sphenoid.

9. In the sphenoid bone:

- (a) The dorsum sellae is the anterior boundary of the pituitary fossa.
- (b) The dorsum sellae merges laterally with the posterior clinoid process.
- (c) The foramina ovale, rotundum and spinosum are in the greater wing.
- (d) The greater wing separates the frontal lobe of the brain from the infratemporal fossa below.
- (e) Foramen rotundum travels from Meckel's cave to the pterygopalatine fossa.

10. Regarding the foramen of the base of the skull:

- (a) Foramen ovale transmits the mandibular division of the fifth nerve.
- (b) The foramen spinosum is posterolateral to the foramen ovale.
- (c) The vidian or pterygoid canal is inferior to the sphenoid sinus.
- (d) The internal carotid artery passes through the foramen lacerum.
- (e) Foramen of Vesalius transmits an emissary vein and is medial to the foramen ovale.

Date: 09/05/19

From

Dr.R.CHIDHAMBARAM
Professor and Head,
Department of Radiology,
Sri Lakshmi Narayana Institute of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

Through Proper

Channel

To

The Dean,
Sri Lakshmi Narayana Institute of Medical Sciences
Bharath Institute of Higher Education and Research,
Chennai.

Sub: Completion of value-added course: INTEGRATED BRAIN ANATOMY-MRI BRAIN

Dear Sir,

With reference to the subject mentioned above, the department has conducted the value-added course titled: : INTEGRATED BRAIN ANATOMY-MRI BRAIN for 20 medical student (batch 2) .

We solicit your kind action to send certificates for the participants, that is attached with this letter. Also, I am attaching the photographs captured during the conduct of the course.

Kind Regards,

Dr.R.Chidambaram

Encl: Certificates

Photographs

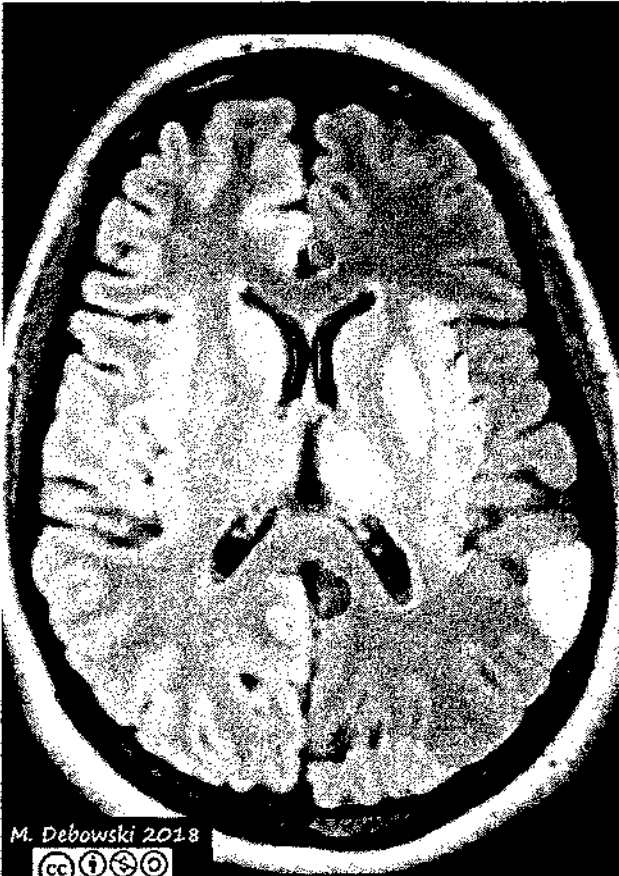
DEPARTMENT OF RADIOLOGY,
SRI LAKSHMI NARAYANA
INSTITUTE OF MEDICAL SCIENCES
BUDUCHETTI-605 004.

SRI LAKSHMI NARAYANA
INSTITUTE OF MEDICAL SCIENCES
DEPARTMENT OF RADIOLOGY AND IMAGING SCIENCES

INTEGRATED
ANATOMY TEACHING
BRAIN ANATOMY: MRI

COURSE CONTENTS

Basic views
Identifying Parts of skull
Identifying brain lobes
Identifying Ventricles
Identifying Vasculature



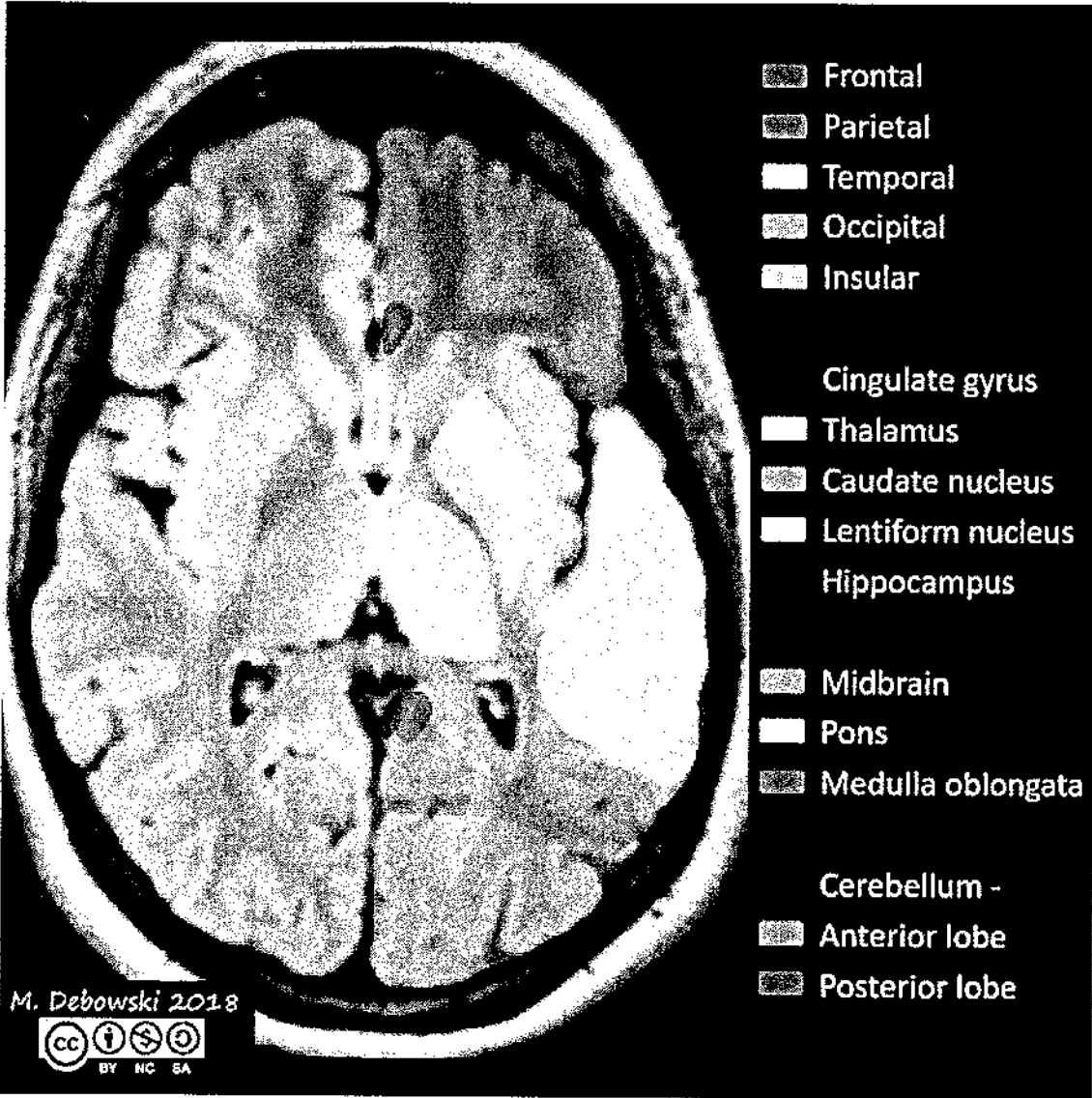
- Frontal
- Parietal
- Temporal
- Occipital
- Insular

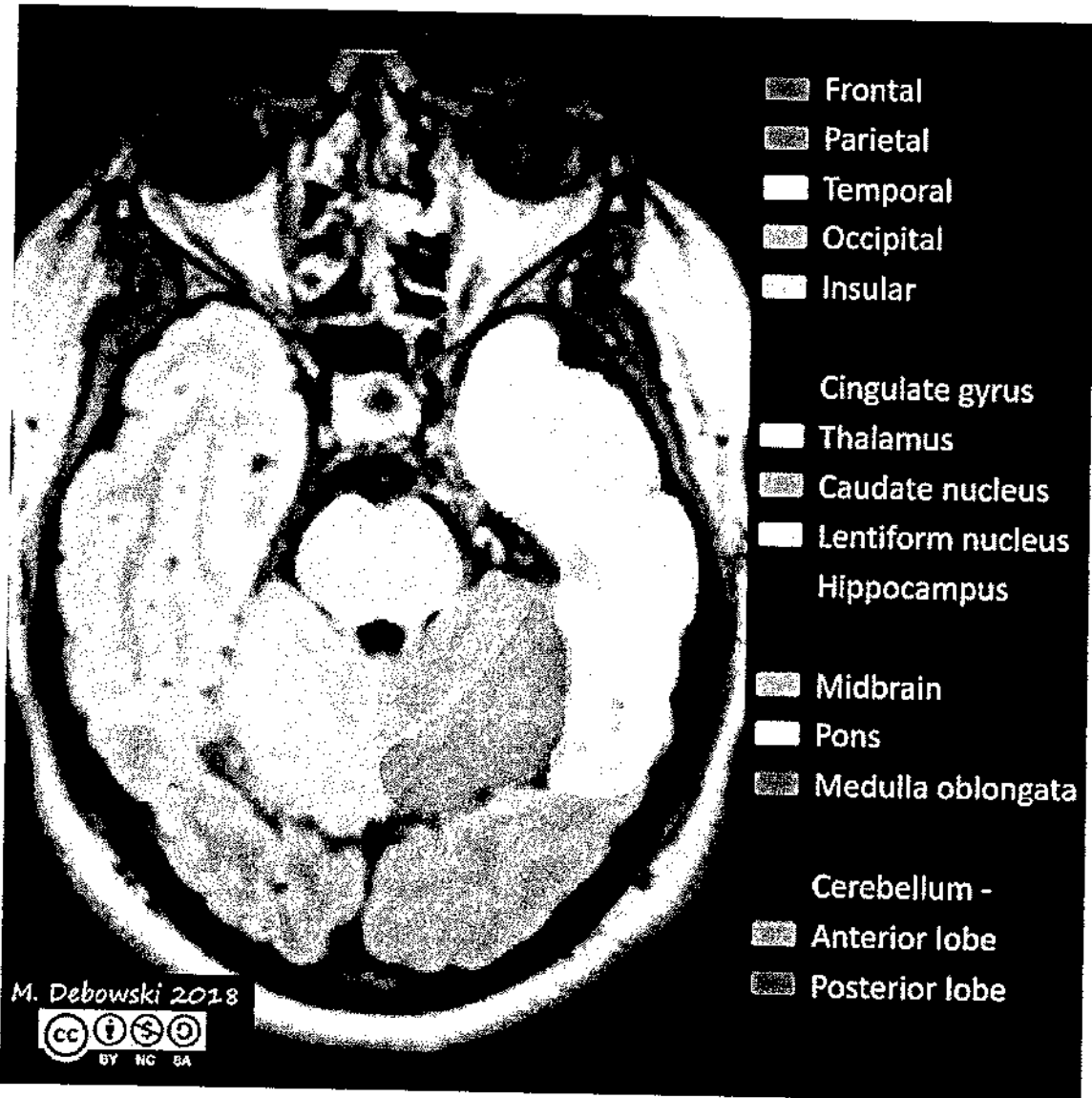
- Cingulate gyrus
- Thalamus
- Caudate nucleus
- Lentiform nucleus
- Hippocampus
















- Midbrain
- Pons
- Medulla oblongata

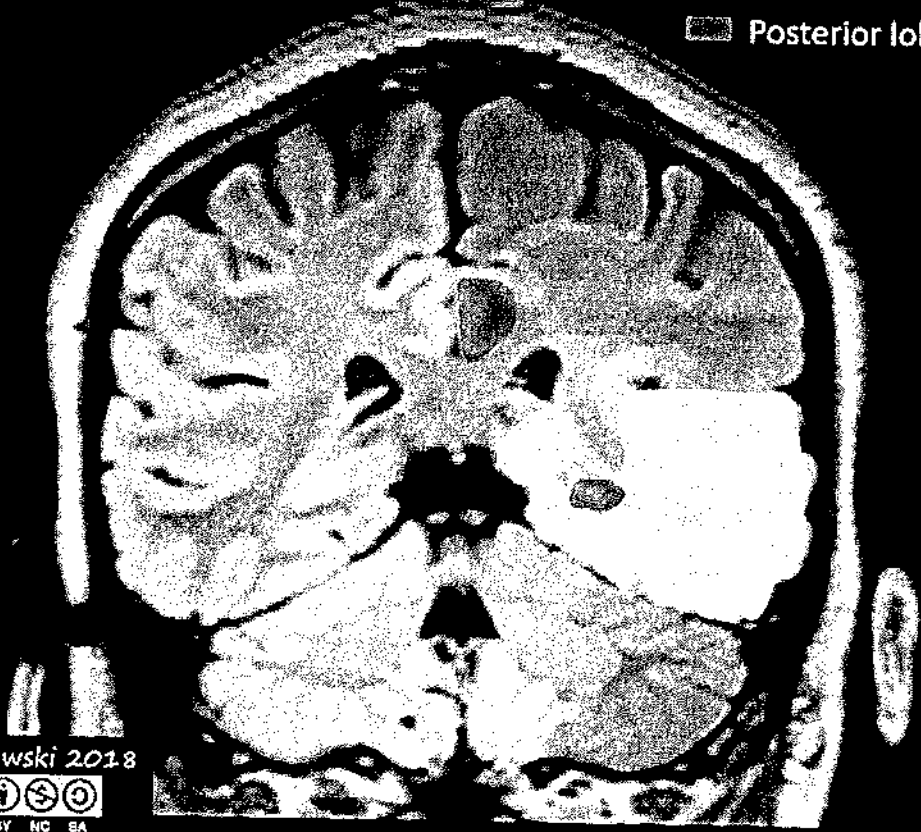
- Cerebellum -
- Anterior lobe
- Posterior lobe

M. Debowski 2018
CC BY NC SA




















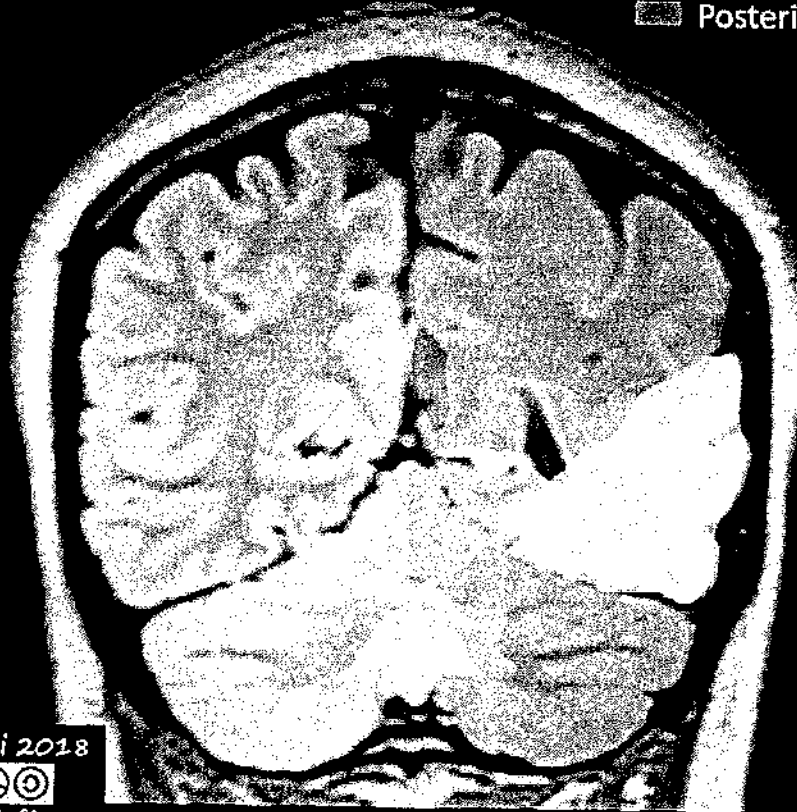
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|  Frontal |  Cingulate gyrus |  Midbrain |
|  Parietal |  Thalamus |  Pons |
|  Temporal |  Caudate nucleus |  Medulla oblongata |
|  Occipital |  Lentiform nucleus |  Cerebellum -
Anterior lobe |
|  Insular |  Hippocampus |  Cerebellum -
Posterior lobe |



M. Debowski 2018


















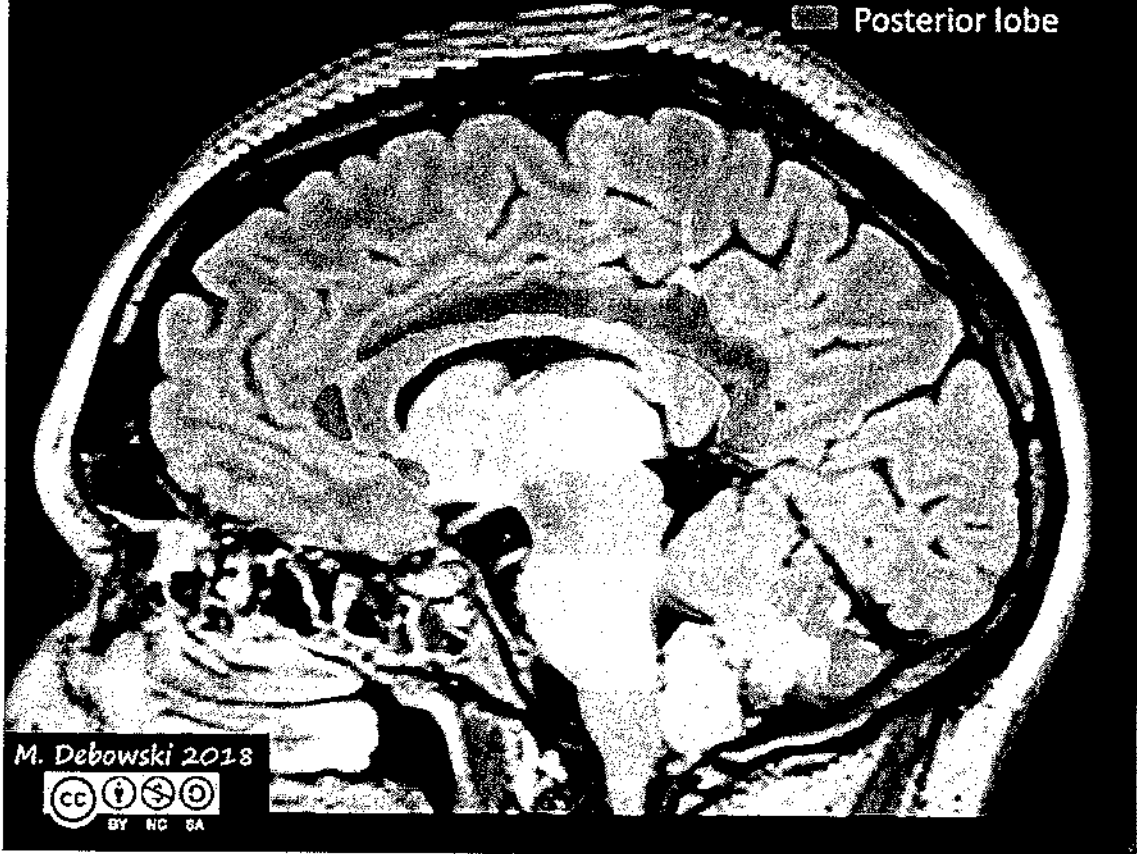
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|  Insular |  Hippocampus |  Cerebellum - Posterior lobe |



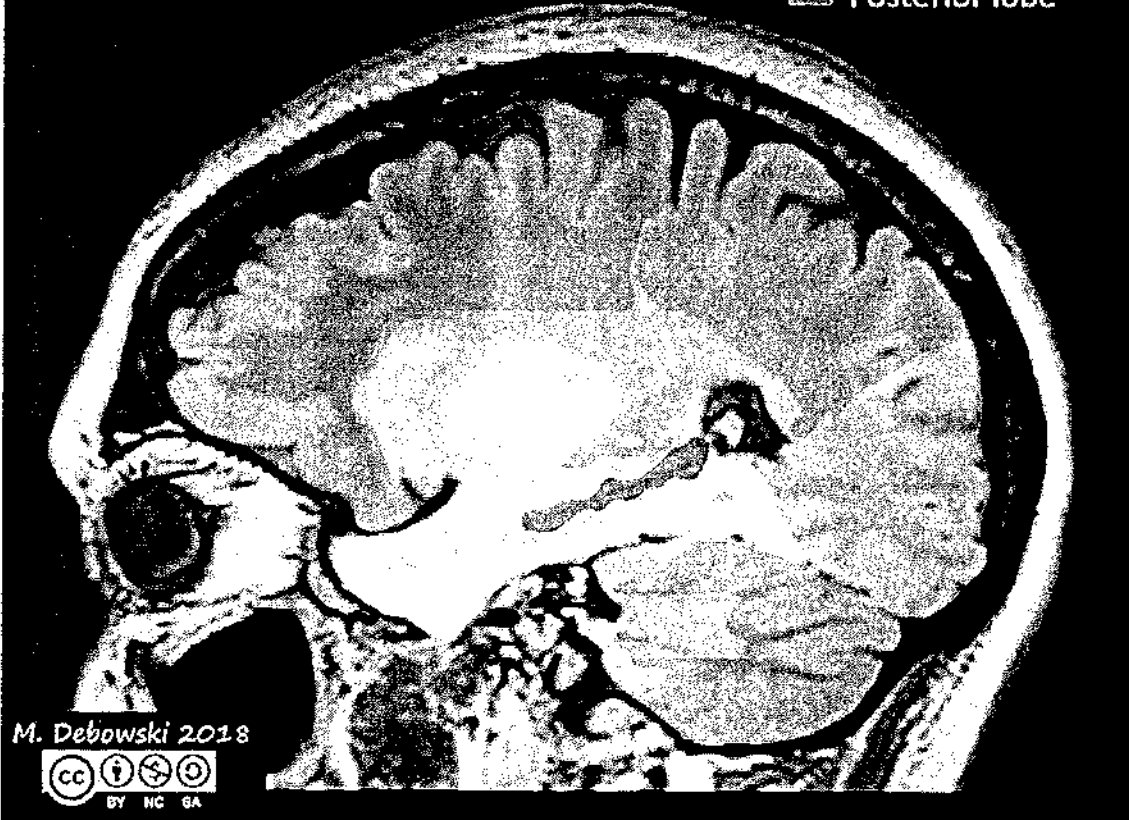
M. Debowski 2018



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Posterior lobe |

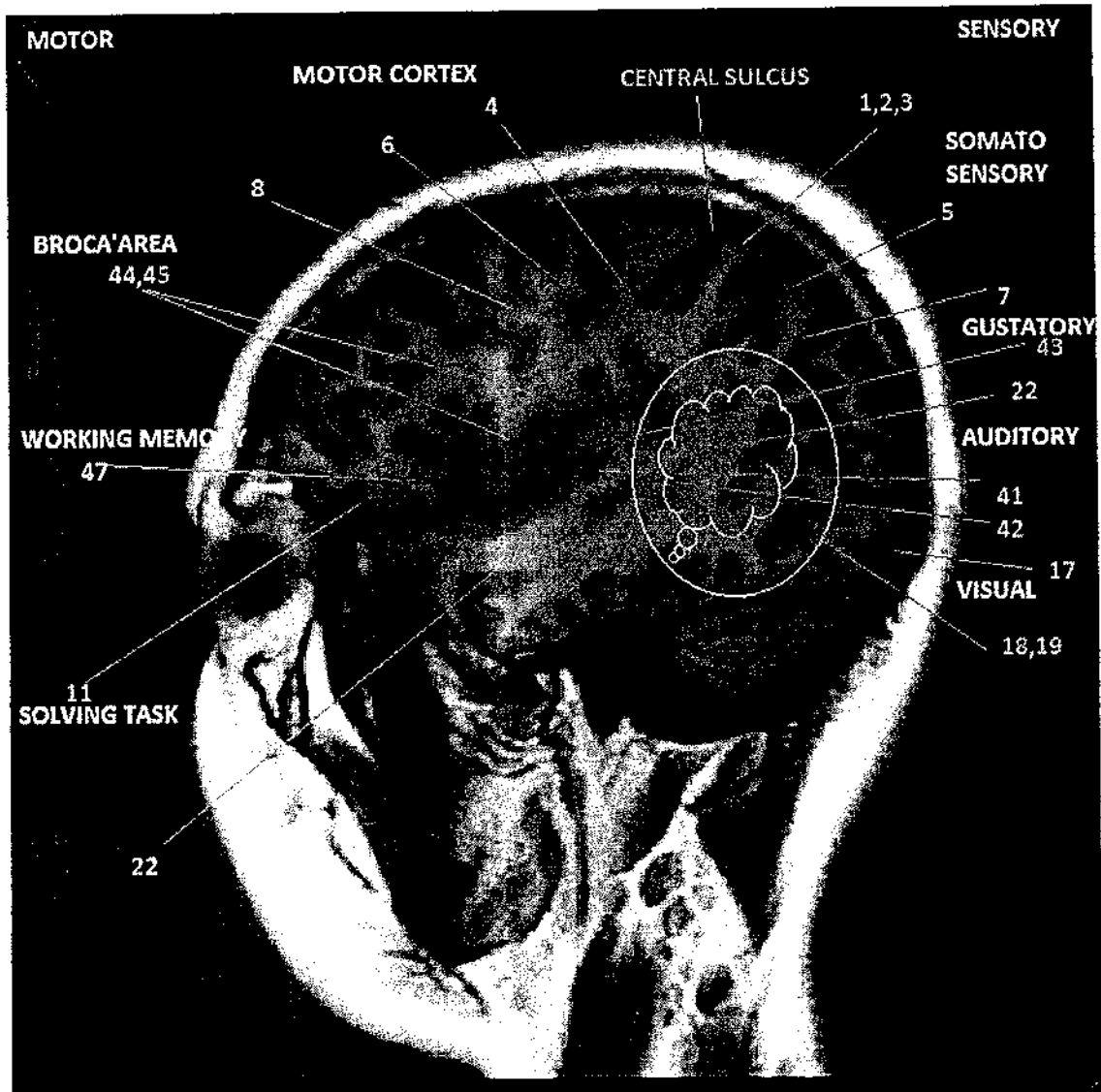


- Frontal
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- Midbrain
- Pons
- Medulla oblongata
- Cerebellum -
- Anterior lobe
- Posterior lobe



M. Debowski 2018





VENUE:

LECTURE HALL:II

TIME : SAT 2 TO 4 PM.